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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,889	07/02/2003	Marion J. Ince	P/4172-16	6887
2352	7590	10/17/2006	EXAMINER	
OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			JOYCE, WILLIAM C	
			ART UNIT	PAPER NUMBER
			3682	

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/613,889	Applicant(s) INCE ET AL.	
	Examiner William C. Joyce	Art Unit 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b)

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 2, 5 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, and 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to the amendment filed July 24, 2006 for the above identified patent application.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barr (US Patent 3,586,406) in view of Schaeffler et al. (US Patent 2,772,128).

Barr discloses a cage for cylindrical rolling-contact elements in which at least two rolling-contact elements (26), that are in contact with one another at their lateral surfaces, are arranged in series in the circumferential direction in a pocket and each of the two rolling contact elements is guided parallel a cage axis by webs (32,34,36,37) connecting adjoining side rings (31) to one another, wherein the webs, comprise sections (34,36) that extend parallel to the cage axis, lie partially inside and partially outside the pitch circle and are connected to one another by sections that extend obliquely to the cage axis, the cage being formed into a round shape from a profiled sheet-metal strip (see paragraph spanning column 2-3).

Barr does not disclose stub-shaped webs on the side rings in the center of the pockets between the rolling-contact elements, but the prior art to Schaeffler et al. discloses the claimed stub-shaped webs (27,28) used in combination with a roller bearing cage for holding the rollers within the cage pockets. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cage of Barr with stub-shaped webs, as taught by Schaeffler et al., motivation being to holding the rollers within the cage pockets.

Referring to Figure 13, Schaeffler et al. illustrates a clearance between the stub shaped webs and the rolling contact elements. Note, the stub shaped web 27 is larger in size than the stub shaped web 28. Further, the disclosure describes the stub shaped webs as extending into a free space.

With respect to claim 3, Barr illustrates in Figures 5-6 the cage being configured to hold the rollers on the inside while the outer ring (20) holds the rollers on the outside.

With respect to claim 4, Barr illustrates the web portion (36) extending parallel to the cage axis and positioned inward of the pitch circle, but does not teach the web portion (36) being positioned outside the pitch circle as defined by the claim. It would have been obvious to one of ordinary skill in the art at the time the invention was made to reverse the web portions (36) of Barr so as to extend outside the pitch circle, so as to hold the rolling members from falling out of the cage in an outward direction when the outer race is removed from the bearing assembly.

With respect to claim 6, Barr does not disclose the thickness of the cage material being less than or equal to 30% of the diameter of the rolling members. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cage thickness of Barr so as to provide adequate support to the rolling members, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Response to Arguments

Applicant's arguments filed July 24, 2006 have been fully considered but they are not persuasive. Applicant argues the stub shaped webs are not disclosed as being sized so as to not contact the rollers during rotation of the cage. Referring to Figure 13, Schaeffler et al. illustrates a clearance between the stub shaped webs and the rolling contact elements. Note, the stub shaped web 27 is larger in size than the stub shaped web 28. Further, the disclosure describes the stub shaped webs as extending into a free space and does not describe the stub shaped webs as extending into a space that is occupied by the rollers so as to engage the rollers. Accordingly, it is understood the stub shaped webs of Schaeffler et al. are provided so as to only prevent the rollers from falling out of the bearing device and are not used to guide the rollers during rotation of the cage.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Joyce whose telephone number is (571) 272-7107. The examiner can normally be reached on Monday - Thursday 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3682

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William C. Joyce